## **ABSTRACT**

[0068] Packet round trip times (RTT) within a communication network are measured and from those measurements information regarding congestion conditions within the network is extracted. The RTT measurements are organized into an invariant distribution (a histogram) and an analytrial tool which is designed to reveal periodicity information (such as a fowier or wavelet transform, etc.) is applied to the distribution to obtain a period plot. Form this period plot, bandwidth information (indicative of the congestion conditions and/or link capacities within the network) can be obtained.